SECTION 1. IDENTIFICATION

Product name : Sikadur®-31 Hi-Mod Gel Part A

Manufacturer or supplier's details

Company name : Sika Canada Inc.
601, avenue Delmar
Pointe-Claire, QC H9R 4A9
Canada
www.sika.ca

Telephone : (514) 697-2610 / 1 (800) 933-7452
Telefax : (514) 694-2792

Health and Safety Services’s e-mail address : ehs@ca.sika.com

Emergency telephone : CANUTEC (collect) (613) 996-6666 (24 hours)

Recommended use of the chemical and restrictions on use
For further information, refer to product data sheet.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Skin irritation : Category 2
Eye irritation : Category 2A
Skin sensitization : Category 1
Carcinogenicity (Inhalation) : Category 1A
Specific target organ systemic toxicity - repeated exposure : Category 1 (Lungs)

GHS label elements

Hazard pictograms : 

Signal Word : Danger
Hazard Statements : H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H350i May cause cancer by inhalation.
H372 Causes damage to organs (Lungs) through prolonged or repeated exposure.

Precautionary Statements:

Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
P302 + P352 IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:
P405 Store locked up.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards
None known.

Supplemental information
If product is in liquid or paste form, physical or health hazards listed related to dust are not considered significant. However, product may contain substances that could be potential hazards if caused to become airborne due to grinding, sanding or other abrasive processes.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz (SiO2)</td>
<td>14808-60-7</td>
<td>&gt;= 40 - &lt; 50</td>
</tr>
<tr>
<td>bisphenol-A-(epichlorhydrin) epoxy resin</td>
<td>25068-38-6</td>
<td>&gt;= 30 - &lt; 40</td>
</tr>
<tr>
<td>Quartz (SiO2) &lt;5µm</td>
<td>14808-60-7</td>
<td>&gt;= 0 - &lt; 1</td>
</tr>
</tbody>
</table>
SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
                    Consult a physician.
                    Show this material safety data sheet to the doctor in attend-
                    ance.

If inhaled : Move to fresh air.
              Consult a physician after significant exposure.

In case of skin contact : Take off contaminated clothing and shoes immediately.
                                Wash off with soap and plenty of water.
                                If symptoms persist, call a physician.

In case of eye contact : Immediately flush eye(s) with plenty of water.
                                Remove contact lenses.
                                Keep eye wide open while rinsing.
                                If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.
                  Do not induce vomiting without medical advice.
                  Do not give milk or alcoholic beverages.
                  Never give anything by mouth to an unconscious person.
                  Obtain medical attention.

Most important symptoms and effects, both acute and delayed : Allergic reactions
                                                               Excessive lachrymation
                                                               Erythema
                                                               Dermatitis
                                                               See Section 11 for more detailed information on health effects
                                                               and symptoms.
                                                               Irritant effects
                                                               Sensitizing effects
                                                               Carcinogenic effects
                                                               Causes skin irritation.
                                                               May cause an allergic skin reaction.
                                                               Causes serious eye irritation.
                                                               May cause cancer by inhalation.
                                                               Causes damage to organs through prolonged or repeated
                                                               exposure.

Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local cir-
                                                               cumstances and the surrounding environment.

Further information : Collect contaminated fire extinguishing water separately. This
                                                               must not be discharged into drains.
                                                               Fire residues and contaminated fire extinguishing water must
                                                               be disposed of in accordance with local regulations.
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Version 1.2
Revision Date: 01/03/2017
SDS Number: 00000603908

Special protective equipment for fire-fighters:
In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Use personal protective equipment.
Deny access to unprotected persons.

Environmental precautions:
Do not flush into surface water or sanitary sewer system.
If the product contaminates rivers and lakes or drains inform respective authorities.
Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up:
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion:
Normal measures for preventive fire protection.

Advice on safe handling:
Avoid exceeding the given occupational exposure limits (see section 8).
Do not get in eyes, on skin, or on clothing.
For personal protection see section 8.
Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
Smoking, eating and drinking should be prohibited in the application area.
Follow standard hygiene measures when handling chemical products.

Conditions for safe storage:
Prevent unauthorized access.
Store in original container.
Keep container tightly closed in a dry and well-ventilated place.
Observe label precautions.
Store in accordance with local regulations.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
</table>

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Quartz (SiO2) 14808-60-7 TWA (Respirable fraction) 0.1 mg/m³ CA ON OEL

TWA (Respirable particulates) 0.025 mg/m³ CA AB OEL

TWA (Total dust) 0.1 mg/m³ CA QC OEL

TWA (Total dust) 0.025 mg/m³ (Silica) CA BC OEL

TWA (Total dust) 0.025 mg/m³ (Silica) ACGIH

calcium carbonate 471-34-1 TWAEV (Total dust) 10 mg/m³ CA QC OEL

TWA 10 mg/m³ (Calcium) CA AB OEL

TWA 10 mg/m³ (Calcium carbonate) CA AB OEL

Quartz (SiO2) <5µm 14808-60-7 TWA (Respirable fraction) 0.1 mg/m³ CA ON OEL

TWA (Respirable particulates) 0.025 mg/m³ CA AB OEL

TWA (Respirable particulates) 0.1 mg/m³ CA QC OEL

TWA (Respirable particulates) 0.025 mg/m³ (Silica) CA BC OEL

TWA (Respirable particulates) 0.025 mg/m³ (Silica) ACGIH

**Engineering measures**: Use of adequate ventilation should be sufficient to control worker exposure to airborne contaminants. If the use of this product generates dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

**Personal protective equipment**

**Respiratory protection**: Use a properly fitted NIOSH approved air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.
Hand protection

Remarks: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eye protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary.

Skin and body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas. Wash thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: paste
Color: white
Odor: aromatic
Odor Threshold: No data available
pH: No data available
Melting point/range / Freezing point: No data available
Boiling point/boiling range: No data available
Flash point: > 100 °C (> 212 °F)
Method: closed cup
Evaporation rate: No data available
Flammability (solid, gas): No data available
Upper explosion limit: No data available
Lower explosion limit: No data available
Vapor pressure: 0.001 hpa (0.001 mmHg)
Relative vapor density: No data available
Density: ca. 1.8 g/cm3 (20 °C (68 °F))
Solubility(ies)

Water solubility : insoluble

Partition coefficient: n-octanol/water : No data available

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : > 20.5 mm²/s (40 °C)

Explosive properties : No data available

Molecular weight : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : The product is chemically stable.

Possibility of hazardous reactions : Stable under recommended storage conditions.

Conditions to avoid : No data available

Incompatible materials : No data available

No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Not classified based on available information.

Ingredients:

bisphenol-A-(epichlorhydrin) epoxy resin:

Acute oral toxicity : LD50 Oral (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 20,000 mg/kg

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/eye irritation
Causes serious eye irritation.
Respiratory or skin sensitization
Skin sensitization: May cause an allergic skin reaction.
Respiratory sensitization: Not classified based on available information.

Germ cell mutagenicity
Not classified based on available information.

Carcinogenicity
May cause cancer by inhalation.

IARC
Group 1: Carcinogenic to humans
Quartz (SiO2) 14808-60-7
Quartz (SiO2) <5µm 14808-60-7

Group 2B: Possibly carcinogenic to humans
titanium dioxide 13463-67-7

NTP
Known to be human carcinogen
Quartz (SiO2) 14808-60-7
Quartz (SiO2) <5µm 14808-60-7

Reproductive toxicity
Not classified based on available information.

STOT-single exposure
Not classified based on available information.

STOT-repeated exposure
Causes damage to organs (Lungs) through prolonged or repeated exposure.

Aspiration toxicity
Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Ingredients:

bisphenol-A-(epichlorhydrin) epoxy resin:
Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 2 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 1.8 mg/l
Exposure time: 48 h

Persistence and degradability
No data available
Bioaccumulative potential
No data available

Mobility in soil
No data available

Other adverse effects

**Product:**
Additional ecological information:
- Do not empty into drains; dispose of this material and its container in a safe way.
- Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- May be harmful to the environment if released in large quantities.
- Water polluting material.

SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

**Waste from residues:**
Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

**Contaminated packaging:**
Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

**Domestic regulation**

**TDG (road/train):**
Not regulated as a dangerous good

**International Regulations**

**IATA-DGR**

- **UN/ID No.:** UN 3082
- **Proper shipping name:** Environmentally hazardous substance, liquid, n.o.s. (epoxy resin)
- **Class:** 9
- **Packing group:** III
- **Labels:** Miscellaneous Dangerous Goods
- **Packing instruction (cargo aircraft):** 964
- **Packing instruction (passenger aircraft):** 964

**IMDG-Code**
SAFETY DATA SHEET

Sikadur®-31 Hi-Mod Gel Part A

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin)
Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

Canadian lists
No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER INFORMATION

Revision Date : 01/03/2017
Prepared by : R & D of Sika Canada Inc.

Notice to Reader:
The information contained in this Material Safety Data Sheet applies only to the actual Sika Canada product identified and described herein. This information is not intended to address, nor does it address the use or application of the identified Sika product in combination with any other material, product or process. All of the information set forth herein is based on technical data regarding the identified product that Sika believes to be reliable as of the date hereof. Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's current Product Data Sheet, product label and Material Safety Data Sheet for each Sika product, which are available at web site and/or telephone number listed.

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Full text of other abbreviations
ADR Accord européen relatif au transport international des marchandises
Cas Dangereuses par Route
CAS Chemical Abstracts Service
DNEL Derived no-effect level
EC50 Half maximal effective concentration
GHS Globally Harmonized System
IATA International Air Transport Association
IMDG International Maritime Code for Dangerous Goods
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50</td>
<td>Median lethal dose (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)</td>
</tr>
<tr>
<td>LC50</td>
<td>Median lethal concentration (concentrations of the chemical in air that kills 50% of the test animals during the observation period)</td>
</tr>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978</td>
</tr>
<tr>
<td>OEL</td>
<td>Occupational Exposure Limit</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, bioaccumulative and toxic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted no effect concentration</td>
</tr>
<tr>
<td>SVHC</td>
<td>Substances of Very High Concern</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very persistent and very bioaccumulative</td>
</tr>
<tr>
<td>CA / Z8</td>
<td></td>
</tr>
</tbody>
</table>
SECTION 1. IDENTIFICATION

Product name: Sikadur®-31 Hi-Mod Gel Part B

Manufacturer or supplier’s details
Company name: Sika Canada Inc.
601, avenue Delmar
Pointe-Claire, QC H9R 4A9
Canada
www.sika.ca

Telephone: (514) 697-2610 / 1 (800) 933-7452
Telefax: (514) 694-2792
Health and Safety Services’s e-mail address: ehs@ca.sika.com

Emergency telephone: CANUTEC (collect) (613) 996-6666 (24 hours)

Recommended use of the chemical and restrictions on use
For further information, refer to product data sheet.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Skin irritation: Category 2
Serious eye damage: Category 1
Skin sensitization: Category 1
Carcinogenicity (Inhalation): Category 1A
Specific target organ systemic toxicity - repeated exposure: Category 1 (Lungs)

GHS label elements
Hazard pictograms: 

Signal Word: Danger
Hazard Statements: H315 Causes skin irritation.
Precautionary Statements

**Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**
P302 + P352 IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

**Storage:**
P405 Store locked up.

**Disposal:**
P501 Dispose of contents/ container to an approved waste disposal plant.

**Warning:**
Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage. Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal.

**Other hazards**
None known.

**Supplemental information**
If product is in liquid or paste form, physical or health hazards listed related to dust are not considered significant. However, product may contain substances that could be potential hazards if caused to become airborne due to grinding, sanding or other abrasive processes.

---

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Hazardous ingredients</th>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
</table>

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Sikadur®-31 Hi-Mod Gel  Part B

SECTION 4. FIRST AID MEASURES

General advice
- Move out of dangerous area.
- Consult a physician.
- Show this material safety data sheet to the doctor in attendance.

If inhaled
- Move to fresh air.
- Consult a physician after significant exposure.

In case of skin contact
- Take off contaminated clothing and shoes immediately.
- Wash off with soap and plenty of water.
- If symptoms persist, call a physician.

In case of eye contact
- Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
- In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Continue rinsing eyes during transport to hospital.
- Remove contact lenses.
- Keep eye wide open while rinsing.

If swallowed
- Clean mouth with water and drink afterwards plenty of water.
- Do not induce vomiting without medical advice.
- Do not give milk or alcoholic beverages.
- Never give anything by mouth to an unconscious person.
- Obtain medical attention.

Most important symptoms and effects, both acute and delayed
- Irritant effects
- Sensitizing effects
- Carcinogenic effects
- Allergic reactions
- Excessive lachrymation
- Erythema
- Dermatitis
- See Section 11 for more detailed information on health effects and symptoms.
- Causes skin irritation.
- May cause an allergic skin reaction.
- Causes serious eye damage.
- May cause cancer by inhalation.
- Causes damage to organs through prolonged or repeated exposure.
Notes to physician: Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for fire-fighters: In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Deny access to unprotected persons.

Environmental precautions: Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion: Normal measures for preventive fire protection.

Advice on safe handling: Avoid exceeding the given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the application area. Follow standard hygiene measures when handling chemical products.

Conditions for safe storage: Prevent unauthorized access. Store in original container.
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz (SiO2)</td>
<td>14808-60-7</td>
<td>TWA (Respirable fraction)</td>
<td>0.1 mg/m³</td>
<td>CA ON OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable particulates)</td>
<td>0.025 mg/m³</td>
<td>CA AB OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (respirable dust)</td>
<td>0.1 mg/m³</td>
<td>CA QC OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable)</td>
<td>0.025 mg/m³ (Silica)</td>
<td>CA BC OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable fraction)</td>
<td>0.025 mg/m³ (Silica)</td>
<td>ACGIH</td>
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<tr>
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<td>471-34-1</td>
<td>TWAEV (total dust)</td>
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<td>10 mg/m³ (Calcium)</td>
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<td></td>
<td>TWA</td>
<td>10 mg/m³ (Calcium carbonate)</td>
<td>CA AB OEL</td>
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<tr>
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<td>(c)</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>C</td>
<td>0.1 mg/m³</td>
<td>CA BC OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C</td>
<td>0.1 mg/m³</td>
<td>CA QC OEL</td>
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<tr>
<td></td>
<td></td>
<td>C</td>
<td>0.1 mg/m³</td>
<td>ACGIH</td>
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<tr>
<td>Quartz (SiO2) &lt;5µm</td>
<td>14808-60-7</td>
<td>TWA (Respirable fraction)</td>
<td>0.1 mg/m³</td>
<td>CA ON OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable particulates)</td>
<td>0.025 mg/m³</td>
<td>CA AB OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWAEV (respirable dust)</td>
<td>0.1 mg/m³</td>
<td>CA QC OEL</td>
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<tr>
<td></td>
<td></td>
<td>TWA (Respirable)</td>
<td>0.025 mg/m³ (Silica)</td>
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<tr>
<td></td>
<td></td>
<td>TWA (Respirable fraction)</td>
<td>0.025 mg/m³ (Silica)</td>
<td>ACGIH</td>
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**SECTION 8. PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>paste</td>
</tr>
<tr>
<td>Color</td>
<td>black</td>
</tr>
<tr>
<td>Odor</td>
<td>amine-like</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** : paste

**Color** : black

**Odor** : amine-like

**Odor Threshold** : No data available

**pH** : No data available
### Melting point/range / Freezing point
- No data available

### Boiling point/boiling range
- No data available

### Flash point
- \( > 100 \, ^\circ C \) (> 212 \, ^\circ F)
  - Method: closed cup

### Evaporation rate
- No data available

### Flammability (solid, gas)
- No data available

### Upper explosion limit
- No data available

### Lower explosion limit
- No data available

### Vapor pressure
- 0.001 hpa (0.001 mmHg)

### Relative vapor density
- No data available

### Density
- \( 2.1 \, g/cm^3 \) (20 \, ^\circ C (68 \, ^\circ F))

### Solubility(ies)
- Water solubility: slightly soluble

### Partition coefficient: n-octanol/water
- No data available

### Autoignition temperature
- No data available

### Decomposition temperature
- No data available

### Viscosity
- Viscosity, dynamic: No data available
- Viscosity, kinematic: \( > 20.5 \, mm^2/s \) (40 \, °C)

### Explosive properties
- No data available

### Molecular weight
- No data available

### SECTION 10. STABILITY AND REACTIVITY

#### Reactivity
- No dangerous reaction known under conditions of normal use.

#### Chemical stability
- The product is chemically stable.

#### Possibility of hazardous reactions
- Stable under recommended storage conditions.

#### Conditions to avoid
- No data available

#### Incompatible materials
- No data available
No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Not classified based on available information.

Product:

<table>
<thead>
<tr>
<th>Toxicity Type</th>
<th>Estimate</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute oral toxicity</td>
<td>&gt; 5,000 mg/kg</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Acute inhalation toxicity</td>
<td>&gt; 10 mg/l</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Acute dermal toxicity</td>
<td>&gt; 5,000 mg/kg</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

Ingredients:

Benzyl alcohol:
- Acute oral toxicity: LD50 Oral (Rat): 1,620 mg/kg
- Acute inhalation toxicity: LC50 (Rat): > 4.178 mg/l

triethylenetetramine:
- Acute oral toxicity: LD50 Oral (Rat): 1,716 mg/kg
- Acute dermal toxicity: LD50 Dermal (Rabbit): 1,465 mg/kg

m-phenylenebis(methylamine):
- Acute oral toxicity: LD50 Oral (Rat): 930 mg/kg
- Acute inhalation toxicity: LC50 (Rat): 1.34 mg/l
- Acute dermal toxicity: LD50 Dermal (Rat): > 3,100 mg/kg

Skin corrosion/irritation
Causes skin irritation.

Product:
Result: Skin irritation

Serious eye damage/eye irritation
Causes serious eye damage.
Respiratory or skin sensitization
Skin sensitization: May cause an allergic skin reaction.
Respiratory sensitization: Not classified based on available information.

Germ cell mutagenicity
Not classified based on available information.

Carcinogenicity
May cause cancer by inhalation.

IARC
Group 1: Carcinogenic to humans
Quartz (SiO2) 14808-60-7
Quartz (SiO2) <5µm 14808-60-7

NTP
Known to be human carcinogen
Quartz (SiO2) 14808-60-7
Quartz (SiO2) <5µm 14808-60-7

Reproductive toxicity
Not classified based on available information.

STOT-single exposure
Not classified based on available information.

STOT-repeated exposure
Causes damage to organs (Lungs) through prolonged or repeated exposure.

Aspiration toxicity
Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Ingredients:
Benzyl alcohol:
Toxicity to fish: LC50 (Fish): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h

triethylenetetramine:
Toxicity to fish: LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia): 10 - 100 mg/l Exposure time: 48 h
Toxicity to algae: EC50 (Pseudokirchneriella subcapitata (green algae)): 10 - 100 mg/l
Exposure time: 72 h

2,4,6-tris(dimethylaminomethyl)phenol:
Toxicity to algae: EC50 (Scenedesmus capricornutum (fresh water algae)): > 10 - 100 mg/l
Exposure time: 72 h

m-phenylenebis(methylamine):
Toxicity to fish: LC50 (Oryzias latipes (Japanese medaka)): > 10 - 100 mg/l
Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): > 10 - 100 mg/l
Exposure time: 48 h

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available

Other adverse effects

Product:
Additional ecological information: Do not empty into drains; dispose of this material and its container in a safe way.
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues: Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

Domestic regulation
TDG (road/train): Not dangerous goods

International Regulations
IATA-DGR: Not dangerous goods
IMDG-Code
Not dangerous goods

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

Canadian lists
No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER INFORMATION

Revision Date : 01/03/2017
Prepared by : R & D of Sika Canada Inc.

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Full text of other abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived no-effect level</td>
</tr>
<tr>
<td>EC50</td>
<td>Half maximal effective concentration</td>
</tr>
<tr>
<td>GHS</td>
<td>Globally Harmonized System</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Code for Dangerous Goods</td>
</tr>
<tr>
<td>LD50</td>
<td>Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)</td>
</tr>
<tr>
<td>LC50</td>
<td>Median lethal concentration (concentrations of the chemical in air that kills 50% of the test animals during the observation period)</td>
</tr>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships, 1973</td>
</tr>
</tbody>
</table>
as modified by the Protocol of 1978

OEL  Occupational Exposure Limit
PBT  Persistent, bioaccumulative and toxic
PNEC  Predicted no effect concentration
SVHC  Substances of Very High Concern
vPvB  Very persistent and very bioaccumulative

CA / Z8